

SYSTEM **P**LANNING & **A**NALYSIS **R**eport

S-II2

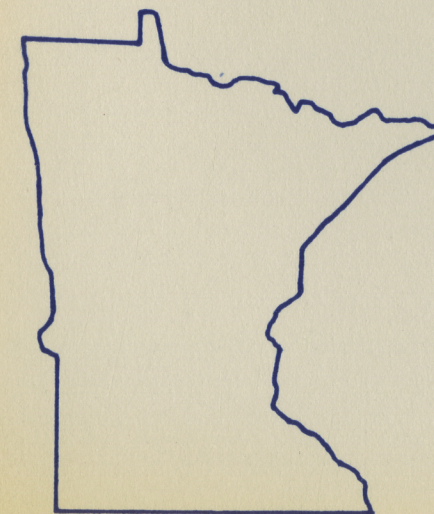
T. H. 494

DELAWARE AVENUE TO
MISSISSIPPI RIVER BRIDGE

S. P. 1985

AUGUST, 1972

PREPARED BY
OFFICE OF SYSTEM PLANNING



**MINNESOTA
DEPARTMENT
OF HIGHWAYS**

Office Memorandum

DEPARTMENT HIGHWAY-Statewide Planning
Room 807 Ext. 3158TO : Paul G. Velz
Road Design Engineer

DATE: August 17, 1972

FROM : Morris Gildemeister, Chief
Statewide Planning SectionSUBJECT: T.H. 494, Delaware Avenue to Mississippi River Bridge,
S.P. 1985
System Planning & Analysis Report S-112

This report is in response to R. D. McAtee's July 11, 1972 request for 1996 ADT & HCADT for the project location as shown on the map on page 2.

For each segment numbered on the map on page 3, the vehicle type distribution is tabulated on pages 4-8. The basic data, method, & assumptions are presented on page 9.

Segment 50 has the highest 1996 ADT on the project. It is 115,600. The 1970 ADT at this point is 28,100.

Morris Gildemeister

Morris Gildemeister, Chief
Statewide Planning Section

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-1-

STATE OF MINNESOTA
DEPARTMENT OF HIGHWAYS
WORK MAP

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1996 PART 1 OF 5

FOR

T.H. 494 S.P. 1985 LENGTH --- MILES
COUNTY Dakota LOCATION Delaware Avenue to
Mississippi River Bridge

BASED ON

1996 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 1 THROUGH 11 AS
DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	1	2	3	4	5	6	7	8	9	10	11
0	26408	5960	5010	12296	10330	2542	1526	19506	5572	3025	2549
1	724	146	120	310	253	64	38	560	145	80	65
2	214	36	32	73	63	16	10	170	22	13	9
3	50	12	8	26	20	6	4	40	14	8	6
4	80	20	22	50	44	8	6	46	10	6	4
5	154	32	23	64	56	12	8	114	35	21	14
6	170	43	40	96	84	12	8	100	32	19	13
TOTAL ADT	27300	6260	5260	12920	10360	2660	1600	20540	5330	3170	2660
TOTAL H. COMM. ADT	1392	300	250	624	530	118	74	1034	253	147	111
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

- 0 = PASSENGER CARS AND 4 TIRE TRUCKS
1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1996 PART 2 OF 5

FOR

T.H. 494 S.P. 1985 LENGTH --- MILES
COUNTY Dakota LOCATION Delaware Avenue to
Mississippi River Bridge

BASED ON

1996 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 12 THROUGH 22 AS
DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	12	13	14	15	16	17	18	19	20	21	22
0	24732	3321	1613	4934	20428	84313	5195	3530	1665	16693	73228
1	602	73	62	135	550	1830	125	82	43	472	1580
2	104	12	30	42	132	1230	60	40	20	92	1110
3	72	9	2	11	60	162	6	4	2	56	150
4	33	5	5	10	34	340	11	7	4	20	318
5	116	17	9	26	86	1582	31	22	9	60	1520
6	250	23	9	32	210	378	22	15	7	194	334
TOTAL ADT	25980	3460	1730	5190	21500	89840	5450	3700	1750	17600	78940
TOTAL H. COMM. ADT	1188	139	117	256	1072	5522	255	170	85	902	5012
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

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- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1996 PART 3 OF 5

FOR

T.H. 494 S.P. 1985 LENGTH --- MILES
COUNTY Dakota LOCATION Delaware Avenue
to Mississippi River Bridge

BASED ON

1996 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 23 THROUGH 33 AS
DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER											
	23	24	25	26	27	28	29	30	31	32	33	
0	18230	5810	14925	77233	7892	7033	78092	2362	5758	42130	48924	
1	540	200	470	1650	228	242	1635	60	130	1362	1670	
2	212	92	198	1124	87	111	1100	40	98	662	780	
3	34	6	23	161	15	8	168	3	18	80	104	
4	46	12	35	329	20	15	334	5	37	102	156	
5	96	22	70	1546	43	27	1562	8	42	190	260	
6	102	28	79	357	45	34	363	12	30	354	366	
TOTAL ADT	19260	6170	15800	82400	8330	7470	83260	2490	6120	44830	52260	
TOTAL H. COMM. ADT	1030	360	875	5167	438	437	5168	128	362	2750	3336	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

* VEHICLE TYPE CODE

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2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
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6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1996 PART 4 OF 5

FOR

T.H. 494 S.P. 1985 LENGTH ---- MILES
COUNTY Dakota LOCATION Delaware Avenue
to Mississippi River Bridge

BASED ON

1996 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 34 THROUGH 44 AS
DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER											
	34	35	36	37	38	39	40	41	42	43	44	
0	4671	4670	10428	98948	8078	11258	105308	6867	91574	86890	3507	
1	182	98	228	2092	232	268	2164	249	1666	226	154	
2	71	70	168	1436	100	192	1620	100	1420	90	68	
3	5	8	26	220	26	24	216	20	176	11	14	
4	10	15	52	439	34	48	466	40	386	24	27	
5	19	25	74	1710	78	120	1794	87	1620	65	61	
6	22	34	64	496	42	60	532	37	458	45	19	
TOTAL ADT	4980	4920	11040	105340	8590	11970	112100	7400	97300	9150	3850	
TOTAL H. COMM. ADT	309	250	612	6392	512	712	6792	533	5726	461	343	
TOTAL DHV												
DIRECTIONAL DISTRIBUTION												

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2 = SINGLE UNIT-3 AXLE TRUCKS
3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
6 = BUSES AND TRUCKS WITH TRAILERS

TRAFFIC ESTIMATE DATA

DESIGN YEAR 1996 PART 5 OF 5

FOR

T.H. 494 S.P. 1935 LENGTH --- MILES

COUNTY Dakota LOCATION Delaware Avenue to Mississippi River Bridge

BASED ON

1996 ADT FROM TRAFFIC ANALYSIS UNIT

SHOWING

TOTAL ADT ON SEGMENTS 45 THROUGH 55 AS

DEFINED ON ATTACHED INDEX MAP

VEHICLE * TYPE	SEGMENT NUMBER										
	45	46	47	48	49	50	51	52	53	54	55
0	3360	4867	3822	21602	19218	108952	28567	103240	2500	10712	108240
1	95	142	84	718	434	2113	166	1786	145	622	2076
2	32	54	36	263	160	1600	60	1420	53	226	1586
3	6	6	5	56	32	193	15	163	13	56	194
4	13	15	9	100	60	434	32	370	27	118	424
5	26	41	24	223	124	1750	55	1640	48	206	1736
6	13	25	20	123	116	543	16	516	14	60	544
TOTAL ADT	3550	5150	4000	23100	20200	115600	3200	109200	2800	12000	114800
TOTAL H. COMM. ADT	190	233	173	1498	932	6648	344	5960	300	1233	6560
TOTAL DHV											
DIRECTIONAL DISTRIBUTION											

* VEHICLE TYPE CODE

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- 1 = SINGLE UNIT-2 AXLE-6 TIRE TRUCKS
- 2 = SINGLE UNIT-3 AXLE TRUCKS
- 3 = TRACTOR-TRUCK OR SEMI-TRAILER- 3 AXLES
- 4 = TRACTOR-TRUCK OR SEMI-TRAILER - 4 AXLES
- 5 = TRACTOR-TRUCK OR SEMI-TRAILER - 5 AXLES
- 6 = BUSES AND TRUCKS WITH TRAILERS

Basic Data, Method, & Assumptions

SPAR M-111 contains the 1996 ADT used for this project.

The HCADT was obtained by projecting vehicle classification counts recorded in or near the study area to 1996 values by using a statewide vehicle type trend study. These values were then applied to the project.